

Work Order ID 60181

Monday, June 28, 2010 1:31:22 PM



Page 1

Item ID: D3852-042

Accept



Setup Start



Revision ID:

Item Name: Rib Assembly

Stop



Start Date: 6/28/2010 Start Qty: 2.00



Cust Item ID:

Required Date: 7/2/2010 Req'd Qty: 2.00



Customer:

Reference:

Approvals:

Process Plan:

PS

Date: *10-6-28*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3852

Rev A

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

1- pick D3166-3 to cut D3852-2 rib (RH) as per dwg D3852 using DT9440 jig

2- drill hole (3/16") in D3852-2 using DT9439 jig and open to finish size as per dwg D3852

3- c'sink hole as per dwg

4- remove identification markings

5- deburr

SAD 10-06-30

6- weld D3759-1 bushing as per dwg D3852

A/R ER316 S.S. Rod Batch: *111679*

7- grind bushing weld flush as per dwg dwg D3852

8- deburr hole if necessary

② *PL 10-07-01*

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 60181

Monday, June 28, 2010 1:31:22 PM

Page 2

Item ID: D3852-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Rib Assembly

Start Date: 6/28/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 7/2/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC9- Inspect visual per QS1004- Fusion Welds

0.00



QC

QC10
5

Memo

0.00

8/26/08

Quality Control

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

8/26/08

Quality Control

(2)

-042

150

Identify as per dwg & Stock Location: WA

0.00



Packaging

Memo

0.00

SAD

10-07-08

2

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 60181

Monday, June 28, 2010 1:31:22 PM

Page 3

Item ID: D3852-042

Accept

Setup Start

Revision ID:

Stop

Item Name: Rib Assembly

Start Date: 6/28/2010 Start Qty: 2.00

Cust Item ID:

Required Date: 7/2/2010 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

7/10 07 08
MF
10-7-8

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Monday, June 28, 2010 1:31:26 PM

Page 1

Work Order ID: 60181

Parent Item: D3852-042

Parent Item Name: Rib Assembly



Start Date: 6/28/2010


Required Date: 7/2/2010

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-02 new issue DD verified by:EC


| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

| | | | | | | | | | | | | | |
|--|--|--------------|----|--|--|-----|------|--------|------|----------|--|--|--|
| D3166-3  Basket Hoop | | Manufactured | No | | | 100 | Each | 9.2838 | 0.18 | 0.378947 | | | |
|--|--|--------------|----|--|--|-----|------|--------|------|----------|--|--|--|

| Location | Loc Qty | Loc Code |
|----------|-------------|----------|
| WA | 9.283751053 | |
| 55697 | 2.1053E-05 | |
| 57504 | 3.28373 | |
| 59266 | 6 | |

3A0 10-06-30

0.378947

| | | | | | | | | | | | | | |
|--|--|--------------|----|--|--|-----|------|---------|---|---|--|--|--|
| D3759-1  Bushing | | Manufactured | No | | | 100 | Each | 81.0000 | 1 | 2 | | | |
|--|--|--------------|----|--|--|-----|------|---------|---|---|--|--|--|

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA | 81 | |
| 54072 | 9 | |
| 59419 | 30 | |
| 59644 | 42 | |

Pl 10-07-01

2

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| ITEM | QTY -041 | QTY -042 | P/N | DESCRIPTION |
|------|-------------|-------------|-----------|--------------|
| 1 | X | | D3852-041 | RIB ASSEMBLY |
| 2 | | X | D3852-042 | RIB ASSEMBLY |
| 3 | 1 | 1 | D3759-1 | BUSHING |
| 4 | 1 | | D3852-1 | RIB |
| 5 | | 1 | D3852-2 | RIB |

D3852-041 RIB ASSEMBLY

D3852-042 RIB ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 60181
BS10-C-28

RELEASE
08/11/07 MP

- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.83 lbs EACH
 - 8) WELDING: PER QSI 004

| | | | | |
|------------|-----------|-------------|----|----------|
| A | NEW ISSUE | | MB | 08.11.07 |
| REV. | | DESCRIPTION | BY | DATE |
| DESIGN | | | | |
| DRAWN | | | | |
| CHECKED | | | | |
| MFG. APPR. | | | | |
| APPROVED | | | | |
| DE APPR. | | | | |
| DATE | 08.11.07 | | | |

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3852** REV. A
SHEET 1 OF 3
TITLE **RIB ASSEMBLY** SCALE NTS

COPYRIGHT © 2008 BY DART AEROSPACE LTD
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS
NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT
WRITTEN PERMISSION FROM DART AEROSPACE LTD.

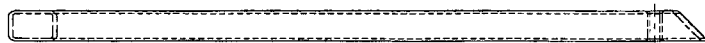
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

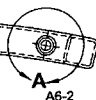
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

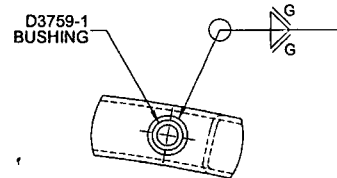


D3852-1
RIB



A6-2

D3852-041 RIB ASSEMBLY

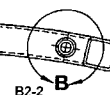


D3759-1
BUSHING

DETAIL A
SCALE 2X C5-2

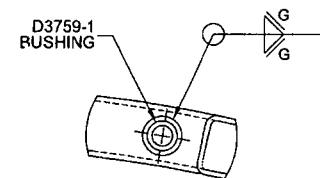


D3852-2
RIB



B2-2

D3852-042 RIB ASSEMBLY



D3759-1
BUSHING

DETAIL B
SCALE 2X C2-2

w/o 60181

RELEASED
08/11/07

| | | | |
|--|----------|--|--------------|
| DESIGN | | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | 125 | DRAWING NO. | REV. A |
| MFG. APPR. | | D3852 | SHEET 2 OF 3 |
| APPROVED | | TITLE | SCALE |
| DE APPR. | | RIB ASSEMBLY | NTS |
| DATE | 08.11.07 | COPYRIGHT © 2008 BY DART AEROSPACE LTD | |
| THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | | |

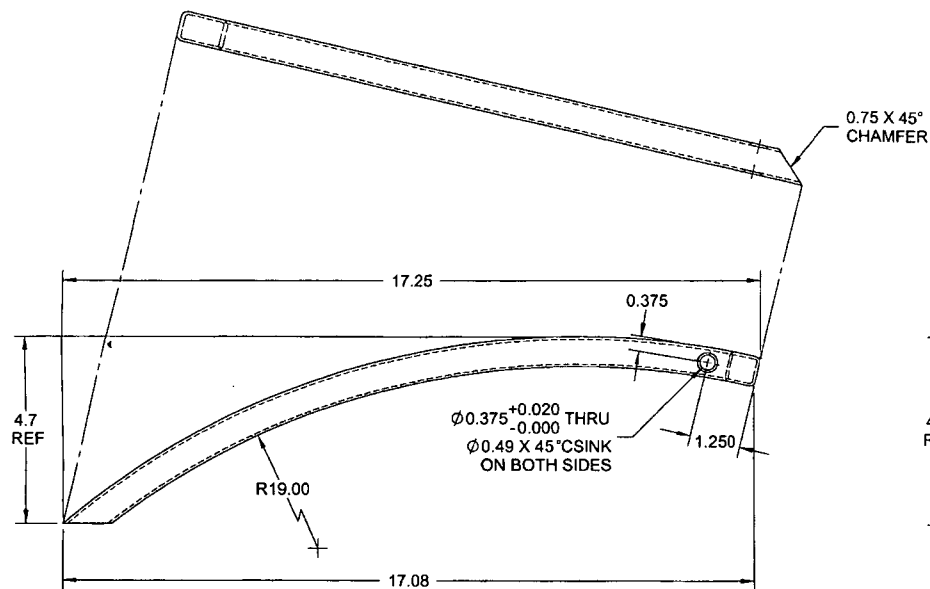
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

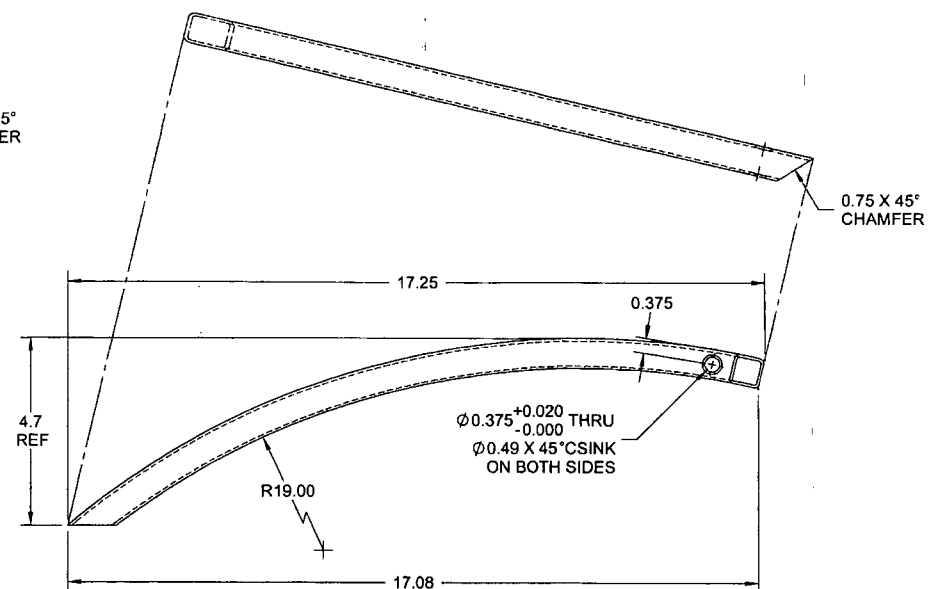
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D3852-1 RIB



D3852-2 RIB

w/o 60181

RELEASED
08/11/18

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL
REF. DART SPEC. M304TS0.750W0.065
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.82 lbs EACH

| | | | |
|------------|--------------------|--|--------------|
| DESIGN | | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | <i>[Signature]</i> | DRAWING NO. | REV. A |
| MFG. APPR. | <i>[Signature]</i> | D3852 | SHEET 3 OF 3 |
| APPROVED | <i>[Signature]</i> | TITLE | SCALE |
| DE APPR. | <i>[Signature]</i> | RIB ASSEMBLY | NTS |
| DATE | 08.11.07 | <small>COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries